

REMARKS/ARGUMENTS

Request for Clarification of Bibliographic Data Sheet and Continuity Data

The amendment to the section of the Specification entitled “Cross Reference to Related Applications” is made to clarify and more clearly identify the priority claims. No new matter has been added. The priority claims as amended do not make any priority claims not previously made in both the Specification as well as the Declaration.

Therefore, Applicants respectfully request that the Bibliographic Data Sheet as well as the Continuity Data in PAIR be updated to reflect the amendment to the Specification filed January 2, 2008 and to reflect both priority claims being made in this case, which priority claims have been approved by the examiner.

The Claims

Claims 1-6, 8-11, 13-17, 19-22 and 24-26 were rejected under 35 U.S.C. 112 as failing to comply with the written description requirement because the independent claims required flushing PDUs in a manner which purportedly was not supported in the originally filed specification. Independent claims 1, 13 and 24 are amended to clarify the element regarding the flushing of PDUs and now require the flushing of PDUs that were transmitted at a time prior to the transmission of a PDU identified in a negative-acknowledge. Support is found therefor on page 5, lines 13-16 among other places.

Claims 1-6, 8-11, 13-17, 19-22 and 24-26 were rejected under 35 U.S.C. 103(a) as being unpatentable over Radhakrishnan et al. (US Patent No. 7,000,021 B1) in view of Rauschmayer (US 2003012868 A1). Paragraph 25 of Rauschmayer is cited for teach a negative acknowledge that identifies a missing packet.

Claims 1, 3, 4-6, 8-11, 13-15, 22 and 24-26 are amended. Claim 2 is canceled. Generally, the independent claims are amended herein and are believed to overcome the grounds for rejections.

Consider claim 1 that requires, as amended:

1. *A method for transmitting wireless communication signals, comprising:
forming MAC layer signals according to a DOCSIS protocol;
adding, at the MAC layer, an ARQ header having a sequence number to each of the MAC layer signals;
transmitting a first group of MAC layer signals within packet data units (PDUs);
storing the transmitted MAC layer signals in a transmitter window of a memory;
buffering out of sequence MAC layer signals until in sequence delivery occurs; and*

Claim 1 requires, (underlined above for emphasis), storing transmitted signals in a memory or buffer that the specification refers to as a "transmitter window". Similarly, Radhakrishnan mentions that the transmitted signals are stored in a buffer. Additionally, however, claim 1 requires (underlined for emphasis), buffering "out of sequence" signals until in-sequence delivery occurs. Support may be found in FIG. 11 and its description in the specification. In contrast, Radhakrishnan uses a bit map to identify what packets must be resent. Presumably, Radhakrishnan obtains and retransmits these packets from the buffer based on the bitmap. Radhakrishnan does not teach, in addition to storing packets in the transmission window (buffer), additionally buffering (storing) out of sequence signals or packets until in sequence delivery occurs.

Claim 1 also requires:

receiving a first negative-acknowledge signal;

if a specified period has elapsed since receiving the first negative-acknowledge signal, requesting an explicit acknowledgment from the receiver or deleting a first group of stored MAC layer signals stored within the transmission window;

receiving a second negative-acknowledge that identifies a missing PDU;

deleting a second group of MAC layer signals stored within the transmission window that were transmitted prior to the identified missing PDU in the negative-acknowledge;

Radhakrishnan. deletes (flushes) after packets are old (FIG. 10, cols 9, 10), a maximum number of retries has been reached (FIG. 7), or a sequence no. is not valid (FIG. 9). Radhakrishnan does not teach flushing all packets having a sequence number that is lower than lowest missing packet sequence number.

Claim 1 also requires:

deleting stored MAC layer signals if the sequence number identified in the first or second acknowledge signal does not correspond to a sequence number for the stored MAC layer signals.

As mentioned above, Radhakrishnan deletes (flushes) if a sequence no. is not valid (see FIG. 9). As discussed above, the claim requires at least two groups of stored packets or signals. Thus, with the present limitation, stored MAC layer signals are deleted, but the stored signals that are deleted in this circumstance includes at least one the first or second groups of signals of the transmission window or even a third group of signals if a received sequence number in a N-Ack signal does not correspond to sequence number of buffered signals.

Independent claim 13 is amended to require storing MAC layer signals in first and second buffers wherein the signals stored in the second buffer are out of sequence signals (similar to claim 1). See the claim amendment that requires storing "*out of sequence MAC layer signals in a second buffer*". Additionally, claim 13 requires three timers and two counters as claimed which are not taught by the cited art.

Independent claim 24 is amended to require:

means for storing transmitted packet data units;

means for receiving the negative-acknowledge and deleting a group of packet data units transmitted prior to a packet data unit identified in the negative-acknowledge;

means for storing out of sequence packet data units;

As discussed in relation to claim 1, it is believed that the means for *means for storing out of sequence packet data units* in addition to *means for storing transmitted packet data units* is not taught by the cited art.

Applicant respectfully requests reconsideration and withdrawal of the Examiner's rejection of claims 1-6, 8-11, 13-17, 19-22 and 24-26 as set forth in the Office Action, and full allowance of the rejected claims.

Should the Examiner have any further comments or suggestions, it is respectfully requested that the Examiner contact please contact James Harrison at (214) 902-8100.

Respectfully submitted,

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